

## Music Department Offers Five-Year Dual-Degree Program

**U**Mass Lowell, the first institution in the United States to offer a bachelor's degree in music education, has revamped its storied curriculum into two programs — a bachelor of music in music studies and a master's of music in teaching.

Department Chair William Moylan says that, by instituting this new format, "We're taking music education to a higher level of sophistication."

The new program was developed with the help of a board of advisors made up of individuals with expertise in education at both the state and national levels.

"They sought to put together a program of excellence, not one that merely met standards," Moylan says. "It's a program of quality; a model that will prepare excellent teachers. We will produce music teachers of greater sophistication than most of the institutions in the country."

The bachelor's — or "pre-education" — program addresses all of the musical skills and teaching competencies needed for the student to become

a music teacher. It does not include student teaching, however, as this element has been moved to the graduate level.

The master's degree program consists of advanced studies in music, graduate level courses in education and music education, and apprentice teaching. It also prepares students for initial teacher certification.

"We've placed the student teaching portion of our program at the graduate level where students are more mature, have a better feel for what music is, and have a better understanding of how to teach it," the chairman says. "They're going to be better teachers."

Meanwhile, he explains, the undergraduate program will have more time to "teach students about music and how to teach in their area of specialization, even though they won't be doing apprentice teaching at that level."

Students can complete both the undergraduate and graduate degree work in five years.



▲ William Moylan

Moylan explained the new program last year to the 47th annual conference of the Massachusetts Music Educators Association where it was "very well received," he says.

All teaching programs at UMass Lowell were moved to the graduate level about 10 years ago, but the Music Department was granted an exception at that time.

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## UMass Lowell Proposal Prepares to Take Off at MassPort

**I**t's a daunting task—take an economic community of over 300 employers and 20,000 employees, some in positions where chronic turnover exceeds 400 percent, and integrate them into a more unified employment structure. Yet, this is exactly what two researchers from UMass Lowell are proposing be done at Boston's Logan International Airport.

Prof. Bill Mass, of Regional Economic and Social Development and co-director of the Center for Industrial Competitiveness, and Prof. Hal Salzman, CIC senior research scientist, have submitted a proposal, "Partners for Port Careers," to overhaul the employment system at the Massachusetts Port Authority (MassPort). The two presented their proposal at a RESD seminar in December.

According to Mass, the proposal calls for the state to "integrate the MassPort micro-economy into a port powerhouse, by bringing together isolated and competing groups."

They propose giving employees in low-level, dead-end jobs a chance to move up the career ladder at the airport. "Workers can begin at a number of entry-level positions and go on to different, higher-paying jobs," Mass said. "The idea is to create a career path."

The two hope to form a cooperative among the firms, creating a corporate network that stretches from one company to another to create multiple incentives for employees to remain at the airport. "Wages alone won't do it," Salzman says.

This way, an employee who starts out taking orders at a fast food counter could potentially move all the way up to a management position with an airline.

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## PeopleSoft Launches Its First Component: Student Recruiting

**S**tudent recruiting, the first UMass Lowell module to be incorporated into the PeopleSoft program, is up and running as of Dec. 3.

Jeff Thompson, UMass Lowell's chief information officer, says, "This is the first step in replacing our current administrative system with state-of-the-art system software."

The recruiting functions that heretofore were developed and implemented independently by Enrollment Services and the

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## McCorkle Welcomed as Second Writer-in-Residence

**F**iction writer Jill McCorkle will spend this spring as the Jack Kerouac Writer-in-Residence at UMass Lowell, where she will be teaching an undergraduate section of Creative Writing in Fiction. According to Prof. Bill Roberts, chair of the English Department, she will also have the opportunity to perform at least two public readings of her work for the campus community.

McCorkle came to Roberts' attention through friends who teach at the University. Originally from Lumberton, N.C., she settled in the Boston area with her family about 10 years ago. Despite numerous teaching assignments, and a 13 and 10-year old at home, she says her writing is "on-going and full time."

The author has just completed a



▲ Jill McCorkle, author of "Creatures of Habit," will be UMass Lowell's Kerouac Writer-in-Residence this spring. Photo by Debi Milligan.

16-city book tour for her third book of short stories, "Creatures of Habit." Each of the stories is named for a particular animal and illuminates a recurrent theme.

"Human behavior," McCorkle says,

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## Take Note

### Summer Science Internships for Incoming Freshmen

In an effort to attract high-achieving students to the study of science, UMass Lowell has launched Summer Opportunities in Science (SOS), a program of paid summer research and academic internships reserved for incoming freshmen majoring in math and science. Positions include a \$2,500 stipend for an eight-week internship.

In announcing SOS, Dr. Robert H. Tamarin, dean of sciences, said, "We think this will be a great opportunity for students to connect with faculty and graduate students in their department and acquire some very useful skills before the start of classes."

Academic internships will be available in biology, chemistry, computer science, math, physics, and environmental, earth, and atmospheric sciences. Research internships are available in areas such as bioinformatics, atmospheric research, meteorology, submillimeter wave technology, photonics, radiation, and advanced materials.

Contact the Dean of Sciences office at ext. 3840 for additional information.

### Women's Week Exhibit Puts Shoes on Display

Shoes have always been cultural symbols. They may be signs of status, occupation, and, in the wake of the Sept. 11 attacks, survival. This year's Lowell Women's Week Public Art will employ shoes as a mirror into women's lives.

The Brush Art Gallery and the UMass Lowell Council on Diversity and Pluralism are collecting works of "shoe" art to include in an exhibit, "Stepping Into an Uncertain World." Everyone is welcome to decorate shoes or to create stories using shoes as metaphors to include in the exhibit. All ideas are welcome, as long as they're no bigger than a shoebox. The submission deadline is Feb. 22.

If you would like more information, or have decorated shoes, contact Maxine Farkas at the Brush Art Gallery, (978) 459-7819.

Lowell Women's Week is being celebrated from March 3 to 9. For information on other activities, check the Web site at [www.Lowellwomensweek.org](http://www.Lowellwomensweek.org), or call Prof. Anne Mulvey, Council on Diversity and Pluralism, (978) 934-4332.

## City's Revised Cultural Development Plan Released

The city's cultural community is calling for greater efforts in the areas of marketing, communication within the city, outreach to Lowell's diverse population, and collaborative fund raising for major organizations, according to the recently released "2001: A Cultural Odyssey: Reviewing the Lowell Cultural Plan."

Published by the Human Services Corporation of Lowell, whose president is Peter Stamas, and the University, the report summarizes results of community meetings on campus last spring during which the city's master plan for cultural development was reviewed and

revised. In 1987, Lowell became the first community in the state to create a comprehensive plan for cultural development. This latest installment is the second major revision of the document. The report includes dozens of recommendations in the areas of education; families and neighborhoods; marketing, image, and funding; organizations, artists, humanists, and scientists; and the city's cultural affairs office.

Leaders and activists explored issues facing the cultural community and framed recommendations that would help sustain the high level of cultural activity in today's Lowell.

The cultural industry has contributed significantly to the city's revitalization in the past 30 years. Among its challenges are the need for funding of organizations that are the foundation of local tourism and the desire to reach larger and more diverse audiences with the city's arts and humanities offerings.

Several members of the faculty and staff played important roles in the project, including Prof. Jim Coates of the Art Department, Executive Director of Communications and Marketing Christine Dunlap, Assoc. Prof. Craig Freeman of the Art Department, Dean Nancy Kleniewski of the Division of Fine Arts, Humanities, and Social Sciences, Paul Marion and Rick Sherburne of Communications and Marketing, Assoc. Prof. Charles Nikitopoulos of the Psychology Department, and Chath pierSath of the Center for Family, Work, and Community.

One of the organizers of the project was the late Mary Bacigalupo of the Center for Field Studies and Services and a long-time board member of the Human Services Corporation. The report is dedicated to Mary.

To obtain copies of the report, contact Paul Marion at ext. 3107 or



### Husband-Wife Team to Share Exhibit at University Gallery

The work of a husband-wife team, sculptor Ronald R. and painter Judith P. Edwards, will be the subject of an exhibition at the University Gallery Jan. 23 through Feb. 20.

Judith's vivid color-field paintings explore the interrelationship of color and form, the space they create and the boundaries they suggest; Ronald's wood-and-mixed-media sculptures are derived from personal experience, as well as his interest in various cultures, gravestone iconography, travel and spirituality. Together, they have the collective effect on the viewer of "defining space and creating relationships between the elements within their works."

The University Gallery is located on the first floor of the McGauvran Student Center.



▲ At top, a detail from Judith Edwards' "Dialogue #2," acrylic on paper, 1998. The detail at bottom is from Ronald Edwards' "El día de los Muertos," mixed media, 1999.



### Work Environment Seminar Features NIOSH Director

▲ Kathy Rest, director of the National Institute for Occupational Safety and Health (NIOSH), was a featured participant at a seminar conducted recently by the Department of Work Environment. Rest has conducted occupational health policy research at the UMass Medical School and is a former chair of the National Advisory Committee on Occupational Safety and Health. With her are Profs. Charles Levenstein, center, and David Wegman.

## Public Agencies Learn Environmental Lessons at UMass Lowell

There is a growing awareness that EMS (Environmental Management Systems) is not just for the private sector. We have improved our efficiency, enhanced our local environmental impacts, and saved money."

So says Mark Young, executive director of the Greater Lowell Regional Wastewater Utility.

EMS for public agencies, known as ISO 14001, was developed by the Environmental Protection Agency (EPA) in 1996 as an outgrowth of the ISO 9000 quality management standard that had been used by the private sector for some time.

After developing the program, the EPA conducted two pilot studies with public agencies—such as hospitals, colleges and public works departments—to find out what worked and what didn't. UMass Lowell was among the groups in the second study.

EPA officials then decided to establish regional environmental training courses in academic institutions. UMass Lowell, with its experience in community projects, applied for and received federal and New England EPA grants to start a program to serve the northeast.

Atty. Matt Donahue, director of the University's Environmental Management Systems Service Program, says the course is conducted over a period of 18 months, starting with a one-day workshop for core team members from participating agencies.

The teams identify the activities in their organizations that affect the environment (such as solid waste disposal), determine priorities, and set objectives for dealing with these problems.

"The commitment under EMS is that you will continually improve," Donahue says. "Every year you evaluate and decide how to improve your performance."

The University is now training three educational institutions—the University of New England, Wentworth Institute and UMass Amherst.

"Our goal is to get these public agencies started," says Donahue. "More than likely, they'll see immediate benefits. We know they'll save money by implementing these systems—and people in charge of these agencies can rest easier because they'll know that their organizations are in compliance with environmental regulations."

A flier explaining the program states, "UMass Lowell has an outstanding reputation for its work on environmental issues, from training workers in environmentally related jobs to advancing efforts for sustainable regional development. Whether it is toxics use reduction, water treatment, or the handling of hazardous materials, UMass Lowell's faculty and staff have extensive experience and knowledge."

## Engineering Research Seminar Series Continues Focus on Materials

With a discussion of the assembly methods and application possibilities of quantum dots, Chemical Engineering Asst. Prof. Carl Lawton kicked off the fall semester Engineering Research Seminar Series.

The one-hour seminars are held Wednesdays, starting at 11:30 a.m., in Kitson 309, the Engineering conference room.

The seminars focus on materials research in different disciplines, allowing faculty to learn more about research activities on campus and to explore the possibilities for interdisciplinary collaboration.

Continuing the series, Work Environment Prof. Kenneth Geiser discussed strategies for reducing the toxicity of materials used in production. Plastics Engineering Asst. Prof. Joey Mead presented her research projects on recycling of thermoset rubber and on characterization of tank-track components. Electrical and Computer Engineering Prof. Kanti Prasad discussed a Raytheon project to improve chip yield and enhance reliability.

Engineering Dean Krishna Vedula applauded the presentations and encouraged faculty to attend.

"Presentations of research are an excellent opportunity to discover common issues and overlapping problems," said Vedula. "During discussions, researchers from other disciplines have ideas about funding sources, offer solutions to technical problems, and extend the possibilities for applications."

For more information about the spring seminar series, contact the Dean's office at ext. 2576.

## Collaboration with University of Delhi Yields Research Excellence

Under a program initiated two years ago by the late Prof. Sukant Tripathy of UMass Lowell and Prof. V.S. Parmar of the University of Delhi, a Ph.D. candidate registered at the University of Delhi completed her research at UMass Lowell's Center for Advanced Materials as a visiting scientist. Sucharita Roy's research on the development of highly useful and novel materials through enzymatic and bio-mimetic routes has resulted in several research papers and one patent.

Last year two students were invited as visiting scientists to the Center for Advanced Materials and the Institute for Nano Science and Engineering Technology. Najam Shakil and Vijayendra Kumar are working under the direction of Prof.

Arthur Watterson, Chemistry, Prof. Jayant Kumar, Physics, and Dr. Ashok Cholli, Center for Advanced Materials. Their work in the areas of biocatalysis and development of novel polymeric materials has resulted in two patent applications and three manuscripts in publication.



▲ Sucharita Roy, second from left, defended her dissertation at UMass Lowell, in a collaboration with the University of Delhi. With her, from left, are Dean of Sciences Robert Tamarin, Dr. Lynne Samuelson, visiting scientist in the Center for Advanced Materials, Chemistry Prof. Emeritus Arthur Watterson, and Chemistry Prof. V.S. Parmar.

The collaboration builds on a long-term relationship with the University of Delhi, in which three scientists came to UMass Lowell as postdoctoral fellows and completed productive periods of research during the 1990s. Similarly, University of Delhi graduate Dr. Rajesh Kumar has recently joined UMass Lowell as a senior postdoctoral associate. Kumar has initiated a program on the biocatalytic synthesis of organo-silicon polymers, which hold promise in the development of novel materials having unique properties and functions.



Paula Rayman

## Rayman Joins RESD Faculty

"I've always been fascinated by the meaning of work in people's lives," said Paula Rayman at a Regional Economic and Social Development seminar last fall, discussing her book, *Beyond the Bottom Line*. Rayman is joining the RESD faculty, and is conducting a study, "Project Techforce: Women and Men in Information Technology Workplaces," to survey workers in the Massachusetts information technology (IT) sector. She received a \$624,000 grant from the National Science Center to fund the study and is partnering with the Massachusetts Software and Internet Council. She'll be receiving additional support from the Center for Industrial Competitiveness (CIC) and the Center for Women and Work.

A "Launch Party" for the UMass community will be held at the Wannalancit Mill on Jan. 31, 4-6 p.m. For further information, contact Joyce Davis, Research Project Director, CIC, ext. 2727 or 2722, or by emailing Joyce\_Davis@uml.edu, or on the Web at [www.uml.edu/techforce](http://www.uml.edu/techforce).

## River Hawk Hockey Soars to Third Place Nationally

As the Shuttle went to press, River Hawk hockey was ranked third in the country and first in the competitive Hockey East Conference. The team had just completed a home and home sweep of Boston College. They played before a standing-room-only crowd of 6,796 at the Tsongas Arena for an 8-4 win over BC, an exciting game in which the River Hawks scored five goals in the third period.

Other top 10 Hockey East teams include New Hampshire (fourth) and Boston University (seventh).

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## Music Department Offers Five-Year Dual-Degree Program

When the department first moved certification to the graduate level in 1999, it anticipated that an “incongruity” would exist with the accrediting body, the National Association of Schools of Music (NASM), because the association holds that, to be identified as an “education” curriculum, an undergraduate program must include certification.

The advisory group was then formed and devised the new curriculum, with the undergraduate portion described — not as music education — but as music “studies.”

The name change was misinterpreted by a segment of the media.

“We suffered some hard times in the regional press because the word went out that we no longer offered music education,” Moylan says. “But we continue to be a leader in educating music teachers although we no longer call it a ‘music education’ program.”

Some 80 students, about 35 percent of the department’s student body, are now enrolled in the dual-degree program.

“We have a long and distinguished heritage in music education,” Moylan says. “This new program will build on that tradition. I’m very proud of it.”

—JMcD

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## McCorkle Welcomed as Second Writer-in-Residence

“is not so far removed from the most primitive animal behaviors, no matter what we like to think.”

Five of McCorkle’s seven previous books made the New York Times Notables list. She was awarded the John Dos Passos Prize for Excellence in Literature. She’s been teaching in the graduate program at Bennington College for the past several years, and has taught at Brandeis University.

McCorkle prefers to use a traditional workshop format in the classroom where students write and offer input on each other’s work. Beginners, however, read and assess work by established writers.

“A lot of the way I organize my class,” McCorkle says, “depends on the level of the students.”

The writer-in-residence program, now in its second year, is sponsored thanks, in part, to John Sampas, executor of the Kerouac Literary Estate. Andre Dubus III, author of *House of Sand and Fog*, became the first designee last year.

—RS

## Bioinformatics Conference and Poster Session Held

An evening conference and poster session in Bioinformatics was held recently on campus, concluding the first course offered in Biological Sciences in the new Bioinformatics concentration that crosses the disciplines of computer science and mathematics with chemistry and biology. Having completed a semester of team research projects, the 27 graduate students and three undergraduates in the course presented their research to faculty and invited industry representatives from biotech and pharmaceutical companies.

According to Asst. Prof. James Lyons-Weiler, Biological Sciences Department, “The companies are interested in helping to chart the curriculum path for students, since all bioinformatics concentrations are new. Our students are doing excellent research and can expect to contribute to the growth of this exciting field.”

One research team of chemistry and biology students developed a new method in Bioinformatics for predicting the function of proteins when the function is unknown and the identity of the protein is unknown.



▲ Asst. Prof. James Lyons-Weiler, Department of Biological Sciences, second from left, discusses research with UMass Lowell students. They are, from left, Sekh Vadlamudi, Nagendra Kodali, Hiral Gami, Geetha Datari and Vaishnavi Choksi.



▲ Dang Duc Long, left, a Ph.D. candidate in biochemistry at UMass Lowell, meets with Mike Agostino of the Genetics Institute in Andover at the recent conference and poster session in Bioinformatics.



## Collaboration Extends Chemistry Ph.D. Program to UMass Dartmouth

▲ Brian N. Blanchette, seated, is the first candidate to complete his Ph.D. in Analytical Chemistry requirements for the newly-formed joint Ph.D. program in chemistry between the Department of Chemistry at UMass Lowell and the Department of Chemistry and Biochemistry at UMass Dartmouth. Joining Blanchette before his oral dissertation defense in December were the UMass Dartmouth members of his thesis committee, Drs. Yuegang Zuo and Bal Ram Singh, first and third from left; the two UMass Lowell deans in charge of the program, Deans Robert Tamarin, Division of Sciences, College of Arts and Sciences, and Jerry Hojnacki, Graduate School, second and fourth from left; and the two UMass Lowell members of his thesis committee, Profs. Eugene Barry and David Ryan. The program allows a seamless transfer of credits from UMass Dartmouth to UMass Lowell, simultaneous administration of cumulative exams, and the use of video conferencing for the oral research proposal. Six more Ph.D. candidates are working toward degrees under the joint program.

## Spirits High at Dickens Christmas Party

Prof. Diana Archibald of the English Department leads party-goers in a game of “La-di-da” at the Dickens Christmas Party in December. About 60 turned out for the get-together held at the Whistler House Museum of Art and were treated to music, food, drinks and games of the Victorian period.

The party, hosted by the UMass Lowell Department of English, was a benefit for the new Charles Dickens Memorial Scholarship Endowment, a needs-based scholarship for undergraduate English majors.

Similar events are being planned in conjunction with the “Dickens and America: Literature, Industry, and



Culture” conference in April. Gerald Charles Dickens, great-great-grandson of the inimitable author and a reputed actor in his own right, will be on hand to perform several pieces based on the work of Dickens.

For information, contact Prof. Archibald, ext. 4199, or visit the Web at [www.uml.edu/dickens](http://www.uml.edu/dickens).

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## UMass Lowell Proposal Prepares to Take Off at MassPort

This type of coordinated effort at Logan is a major challenge due to the sheer number of businesses on site. Of the 20,000 employees at the airport, Salzman reports, only 1,200 work directly for MassPort. As a result, differences in organizational practices and interests would need to be overcome. —RS



▲ Prof. Hal Salzman discusses a proposal submitted to the Massachusetts Port Authority, "Partners for Port Careers," at a December seminar. Salzman and Prof. Bill Mass, both of the Center for Industrial Competitiveness, are recommending that the employment system at Logan International Airport be overhauled.

## Love Canal Activist Calls for Environmental Action

Lois Gibbs, one of the leaders of the environmental rights movement, jokes that many people call her the "mother of the Superfund." Gibbs met with the advisory board of The New England Consortium at UMass Lowell recently, then appeared in a public forum with Dr. Kenneth Geiser, director of the Toxics Use Reduction Institute.

Today, Gibbs is the executive director of the Center for Health, Environment and Justice, a national consulting group dedicated to fighting for environmental causes.

In the 1970s, she was a housewife and mother living in the Love Canal neighborhood of Niagara Falls, N.Y., and caring for chronically ill children, as were most of her neighbors. When a local newspaper reported that the 15-acre property had been the site of a waste dump containing 20,000 tons of chemicals, and some substances had seeped into house basements, people quickly mobilized.

Gibbs' passion and anger fueled a lengthy legal battle. As a result, the federal government ordered the previous landfill owner to pay \$120 million to cover the cost of cleanup and the relocation of 900 people.

In the immediate aftermath of Love Canal, Congress passed the Superfund legislation.

Gibbs argued that the environmentalist movement is not anti-worker: "The foreman or plant manager is not our enemy," she said. "It's the people in the executive suites in the distant cities and the people sitting on the boards. They're not here in the neighborhood where dioxin contaminates the food."

Several community action groups were represented in the audience, including the Lawrence Grassroots Initiative that had played a key part in forcing the closing of incineration plants in Lawrence.

Also, students in the River Ambassadors program directed by Khan Chao at UMass Lowell's Center for Family, Work and Community attended the forum and met with Gibbs. The River Ambassadors have used Gibbs' experience as the basis for a play they

wrote and perform to teach lessons about environmental activism.

Geiser, himself the leader of a grassroots initiative that resulted in the Massachusetts Toxics Use Reduction Act, praised the efforts of activists.

"Historically, the only lasting voice for safety and security in this country is the people," said Geiser.



▲ CaLois Gibbs, Love Canal activist and now executive director of the Center for Health, Environment and Justice, appeared on campus to discuss grassroots environmental initiatives. With her are Asst. Prof. Craig Slatin, left, Health and Clinical Sciences Department and director of The New England Consortium, and Prof. Kenneth Geiser, Work Environment Department and director of the Toxics Use Reduction Institute

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## PeopleSoft Launches Its First Component: Student Recruiting

Graduate School are now integrated into one system.

When the name of a prospective student is entered into the new system, a letter is automatically generated and sent to that person along with informational material related to the prospect's area of academic interest.

"If they later decide to apply to the University, the information that has been gathered by the recruiter is already in the computer and we don't have to re-enter it," says Thompson. "This is incredibly helpful to us."

Another benefit of the PeopleSoft module, he adds, is that it enables prospective students to access recruiting information via the Web. In addition, when students decide to enroll, their data remains on file as they pass through the admissions process and begin taking courses. This once again eliminates the need to re-enter information already recorded.

The Human Resources phase of PeopleSoft, originally scheduled for February, has been rescheduled for March to allow time for staffers to attend to last-minute details. The

### The Human Resources training has been well attended and received very positively,

Jeff Thompson

Human Resources training has been well attended and received very positively, Thompson says. The change from a weekly to a biweekly payroll system also has been moved from February to March.

The conversion of the Financial Records System to PeopleSoft, scheduled to take place in July, is proceeding on time.

Thompson says the implementation of the recruiting module "is the first of several steps that will be taken over the next two years. When we're done, the University system will look a lot different. It will offer a great deal more functionality for students, employees and staff."

—JMcD

## New Book Defines Regional Development Role for Universities

It's not often a single piece of work can reflect the ideas of a collection of scholars from fields as varied as economics, history, engineering, ergonomics, and public health. But a newly-released book, *Approaches to Sustainable Development: The Public University in the Regional Economy*, published by University of Massachusetts Press, does exactly that.

In 1993 a core group of faculty members at UMass Lowell launched an interdisciplinary study to find ways for the University to help stimulate Lowell's regional development on a sustainable basis. The resulting essays define ways regions can sustain employment, growth and a strong social fabric. And, they suggest ways to accomplish this, not just through business growth, but also by supporting education, improving healthcare, protecting the environment, and understanding challenges faced by minorities.

Chancellor William T. Hogan writes in the book's preface, "For more than 100 years, the University of Massachusetts Lowell has been providing for the common good in its neighboring communities ... Today, we are building on this legacy by directing signifi-

cant resources and our energy toward understanding how the social and economic development works in defined geographic regions."

"I think we have put the University on the map in community and regional development and sustainability," says Prof. Chuck Levenstein, Work Environment, one of the book's editors.

Joining Levenstein in editing the anthology are Profs. Robert Forrant, Jean L. Pyle and William Lazonick, all of the Department of Regional Economic and Social Development.



▲ Prof. Chuck Levenstein, Work Environment, Jean Pyle, RESD, and William Lazonick, RESD, attend the party celebrating the release of *Approaches to Sustainable Development: The Public University in the Regional Economy*, a collection of essays written by UMass Lowell researchers.

## Accounting Program Tallies 100th Internship

**P**rof. Stephen Collins, chair of Accounting, announced that the department's internship program recently reached a milestone when the 100th student completed the three-credit course. Established by Collins in 1995, he says students have shown a steady interest in the practical experience the program offers.



▲ Accounting Prof. Stephen Collins, supervisor of the Accounting Internship Program, discusses the program with three recent interns, Anthony Perrotta '01 (Methuen), Maria Martinez '02 (Lawrence), and Lauren Caputo '02 (Billerica). Perrotta worked at Genesys Software Systems in Methuen; Martinez worked in the Accounts Payable Department at UMass Lowell; and Caputo worked at Universal Software in Chelmsford.

With the help of the University, students find their own jobs and complete an internship application. They work at least 10-15 hours per week for 12-15 weeks. So far, all of the internships have been paid positions, averaging \$10-\$12 per hour.

"It's hard to beat a program that provides both hourly wages and three academic credits, while at the same time giving students a way to

connect their classroom activities to the real world of accounting. It is a winning combination," said Collins.

Students have worked at a wide variety of companies and organizations such as Deloitte & Touche, Ziplink, Inc., Newbury Comics, the Museum of American Textile History, and at numerous University offices.

The interns frequently report that they have a much better idea of what they want to do with their accounting degree, and they are more sophisticated and confident when it comes to their job search. Their resumes are also much stronger.

Employers have been equally enthusiastic. In fact, a number have offered full-time employment to their interns, and many employers have sought out UMass Lowell interns in subsequent semesters or summers to obtain additional help.

Students must complete two reports about the internship experience, and receive a supervisor's written evaluation. Collins also does a site visit to each location. "I've done every one of the 100 site visits myself," says Collins. "They give me a chance to promote the program and the University, to check on the student's working conditions, and to learn what the job is all about."

Collins is confident about the program's future. "We've started on our next hundred students this fall. I'm certain the program will continue its popularity," Collins says.

## Annual Memorial Symposium Features Materials Research

**T**he first Sukant Tripathy Annual Memorial Symposium, sponsored by the Center for Advanced Materials, was held on campus on Nov. 30. All papers presented in the symposium will be published as a special issue of the Journal of Macromolecular Science: Pure and Applied Chemistry.

The symposium will be held every year close to anniversary of Tripathy's death, Dec. 12, and scheduled for the last Friday of the

international meeting of the Materials Research Society, held every year in Boston.

The eight speakers presented current research about novel materials and interesting advances in polymers. Some examples include the role of enzymes in synthesizing polymers, a technology that is environmentally benign and founded in green chemistry; sensory arrays to monitor atmospheric pollutants; spherical nanoparticles based on hydrogels that could be used in

controlled release devices; and designing an implantable glucose sensor.

Russell Gaudiana, vice president for research and development with Konarka Technologies, closed the day with a discussion of the dye-sensitized solar cells developed by Tripathy and now in commercial development at Konarka.

A poster session was held during the symposium lunch break at which 15 graduate students presented their advanced materials research.

A series of events have marked the passing of Sukant Tripathy, whose work inspired not only the UMass Lowell campus but touched the community of scientists worldwide.



▲ Chancellor William T. Hogan, second from left, gave the welcome and opening remarks at the Sukant Tripathy Annual Memorial Symposium held recently. Joining him are the Center for Advanced Materials (CAM) researchers who organized and chaired the sessions: from left, physics Prof. Jayant Kumar, director of CAM; Dr. Ashok Chholli, director of the Center's Nuclear Magnetic Resonance Lab, and chemistry Prof. Daniel Sandman, associate director of CAM.

## Knowledge Powers Massachusetts Economy

**T**hroughout the last decade, the Massachusetts unemployment rates have ridden a roller coaster relative to those in the rest of the U.S. According to a new report from researchers at UMass Lowell, one of the areas that has kept the economy riding high has been the knowledge sector.

The report, "Knowledge Sector Powerhouse," provides a sector by sector analysis of Massachusetts employment, and the impact of knowledge-based services on the overall employment picture. It examines key industries and jobs in Massachusetts at the beginning of the new millennium, and on the brink of a new recession.

According to Profs. Robert Forrant, Philip Moss, and Chris Tilly of Regional Economic and Social Development (RESO), the Massachusetts economy changed through the 1980s and 1990s. Despite the strong blue-collar history of the Commonwealth, it has decisively shifted to

specialize in "knowledge sector" jobs which accounted for more than 100,000 workers as of 1998. This sector includes jobs in biotechnology, software, consulting, and those where the main product is information itself.

Wages in Massachusetts have surged ahead of those in other parts of the country, beginning as early as 1991. This was largely due to the knowledge workers in the workforce. However, total employment growth in Massachusetts has lagged behind the nation since, and these workers themselves generally do not enjoy better pay or benefits than their counterparts nationwide.

While focusing on the continuing strengths of the Massachusetts economy, the report also sounds a note of warning about potential weaknesses that deserve the attention of those who impact future policy and economic choices in the Commonwealth.

To view the report, go to <http://www.uml.edu/Dept/RESO>.

## Tsongas Industrial History Center Serves as Backdrop for PBS Special

**P**BS recently aired "Mill Times," a special based on David Macaulay's book, Mill. The show focused on the industrial revolution, from late 18th-century England through mid-19th century America. A good portion of the documentary part of the program was filmed in Lowell, with several scenes taking place at the Boott Cotton Mills at the Tsongas Industrial History Center, a joint project between the Lowell National Historical Park and UMass Lowell.

A fictional, animated story about people of the times makes up the remainder of the program. Macaulay applied a similar technique to PBS specials "Castle, Cathedral" and "Pyramid." Macaulay is expected to return to Lowell in June for activities and a discussion of his book and the video. In addition to hosting the camera crew, the Tsongas Center provided educational materials for classroom use with the video. The materials and video are available to schools. The Tsongas Center's main number is (978) 970-5080.

## Harry Potter Program Conjures MCAS Success

On any given day, students in the schoolyard of Lowell's Robinson Middle School can be seen playing a number of games: dodge ball, capture the flag,—Quidditch!

The Earth-bound youngsters recently tried their hands at the mythical game from Harry Potter and the Sorcerer's Stone. It's all part of a new reading program at the school called "Harry Potter MCAS Magic," created to prepare students for the MCAS test, especially the reading comprehension portion. The University's Gaining Early Awareness and Readiness for Undergraduate Programs (GearUp) is providing support, approximately \$2,000 per 10-week session.

Robinson School teachers Ruth Fulwider and Sandra Gnewuch created the Harry Potter program to promote a love of reading as well as better performance on the test.

"The books are not just about wizards and magic. They're about right and wrong, making the right choices and taking responsibility for your actions. Also, they're impossible to put down," Fulwider said. "I wanted a program that kids would come to after school and that would keep them coming."

The program requires a lot of preparation time by the teachers. They not only have to know the story inside out, but they need to show how the book matches the strands of the MCAS requirements.

The program has a capacity of 20 per session, and has been over-enrolled for each of the first two sessions. A third session using the second book in the series, Harry

Potter and the Chamber of Secrets, is set to begin in February.

George Tucker, GearUp program coordinator, was eager to assist with the program. He says it's a perfect fit for the type of projects the University program was designed to facilitate. "We felt it was a win-win situation," Tucker said.



▲ Robinson School seventh- and eighth-graders, from left, Thao Chau, Jeffrey Craig, Jhonnatha Cheam, Alyssa Boisvert and Chi Tashi participate in the first session of "Harry Potter MCAS Magic." The program, which receives support from the University's GearUp program, uses the Harry Potter books to help prepare students for the MCAS.

GearUp hires the tutors, purchases hard-cover copies of the books and provides prizes. It also funded a field trip to see the film based on the first book.

"GearUp's support is critical," says Fulwider. "Many of the students could never afford the supplies on their own."

"We are very enthusiastic about helping the students," says Carlos Hinton, GearUp associate program manager.

The program will track its participants' MCAS scores to ascertain how successful it was in preparing them for the exam. Based on the response so far, organizers believe Harry Potter will perform magic.

## UML Literary Society Seeks Submissions

The UMass Lowell Literary Society is now accepting submissions of prose, poetry, photography and artwork for the 2002 issue of The Offering. This is open to students, faculty, staff and alumni. Submissions must include the following:

1. Two hard copies of the work (typed, double-spaced)
2. One copy on disk (please indicate file name and program type)  
All artwork and photography must be submitted on disk.
3. Contact information: name, campus or home address, phone number and e-mail address. Also include your affiliation with the University.

Submissions may be dropped off in the English Department office or sent through campus mail to:

The Offering  
c/o English Department  
412 O'Leary Library, South Campus

## Santa Claus Came to Town



▲ Santa Claus (Student Government Association President John Harrison of Lowell) with his helpers Vice President Denia Gibson of Lowell, left, and SGA Sen. Andre Gorgenyi of Tewksbury, brought a little Christmas joy to youngsters at the Children's Corner in Lowell.

## Technology to Help Combat Domestic Violence

Dr. Carole Pearce, associate professor of Nursing, is an integral part of a coalition working throughout the Merrimack Valley on the issue of domestic violence. Home Health VNA, a leader in the coalition, was recently awarded a \$590,000 grant from the Department of Commerce's Technology Opportunities Program that allows technology to play a larger role in addressing this issue.

The three-year grant will support Rapid Response for Clients at Risk (RRCR), an innovative program providing networked, hand-held computers to visiting nurses serving 24 cities and towns in the Merrimack

Valley and southern New Hampshire. Equipped with an abuse assessment screening tool and a client-at-risk form in both English and Spanish, the computers will enable nurses to coordinate real-time domestic violence detection and intervention.

Pearce, an organizer of the coalition, helped design RRCR and earlier related projects funded by the Massachusetts Department of Public Health and Boston College. She is a member of the team that will develop and modify the screening instruments used by visiting nurses. She and Dr. Joellen Hawkins of Boston College are the evaluators for RRCR.

"This project speeds the process of getting the right services to people who need help," explains Pearce. "It's really exciting to have the coalition develop the means to conduct a project of this size."

UMass Lowell and HealthWyse, the North Reading-based manufacturer of the technology, are among the institutions whose contributions have increased the program budget to \$1.2 million. Participating organizations include the Haverhill Police Department and Merrimack Valley Hospital in Haverhill.



▲ Assoc. Prof. Carole Pearce of Nursing is working with a team to develop a screening instrument that will help visiting nurses detect and intervene in cases of domestic violence.

## Tsongas Industrial History Center Marks Ten-Year Anniversary

**W**hen is one plus one more than two? When the two parts coming together synergize, creating something more than their sum. That's what happened when the University of Lowell partnered with the Lowell National Historical Park (LNHP) to create the Tsongas Industrial History Center 10 years ago, according to participants at a recent celebration marking the Center's 10th anniversary.



▲ From left, Lowell National Historical Park Superintendent Patrick McCrary, Chancellor William T. Hogan, Niki Tsongas, Graduate School of Education Dean Donald Pierson, and Tsongas Industrial History Center Director Peter O'Connell gather around a pencil portrait of Senator Paul Tsongas, which will hang at the Tsongas Center so school children will hear about him and his legacy.

Donald Pierson, dean of the Graduate School of Education, came to Lowell in 1983 to help implement one of Sen. Paul Tsongas's landmark contributions to the city: The Lowell Plan for Educational Excellence. "The main theme of the plan was partnerships—that all the institutions in the region can better achieve their goals by working together collaboratively." The namesake Center has proven that a half million times over, having brought as many school children through its loom and stamping rooms since 1991.

But it took more than a vision and a loose model. "Tsongas was always able to drive the vision to the reality—and that doesn't always happen," said Chancellor William T. Hogan, after welcoming about 60 guests to the Boott Cotton Mills Museum, which is still

home to the Center.

According to Director Peter O'Connell, the partnership is "still an unusual one" in the Park Service, while LNHP Superintendent Patrick McCrary calls it "a model nationwide."

Senator Steven C. Panagiotakos praised the local team that helped create the Center, former state Sen. Paul Sheehy, City Manager and former Rep. John Cox, and former Rep. Susan Rourke. "Lots of programs have Paul Tsongas's fingerprints on them. I think this one was his essence," he said.

Niki Tsongas, who attended the ceremony with her daughter Ashley, echoed that sentiment. "This Center incorporates a lot of things that Paul really cared about: first, preserving architectural history and industrial history and Lowell's cultural legacy, and second, involving the University."

Proving that Tsongas's legacy continues to inspire others, the family was presented with a pencil portrait of the former senator that hushed the audience. The artist was the Tsongas Center's own Martha Shirn Barrett, a project assistant and museum teacher.



▲ Niki Tsongas, right, congratulates Martha Shirn Barrett, project assistant and museum teacher at the Tsongas Industrial History Center, on the pencil portrait she drew of the late Sen. Paul Tsongas. Joining them is Tsongas's daughter, Ashley.



▲ Graduate School of Education Dean Donald Pierson, left, and Sen. Steven C. Panagiotakos were among those who spoke about Tsongas's role in the Industrial History Center's success.

## Chancellor's Holiday Party Attracts Faculty and Staff from Across Campus



▲ Faculty and staff members enjoying the festivities in Alumni Hall included, from left, Claire Bentas, former staff assistant in University Relations and Development; James Whitten, assistant professor of chemistry; Dr. Hogan; Kay Doyle, professor of health and clinical lab sciences; and Christos Bentas, professor of history.



▲ Rizvana Bhaiwala, left, a professional technician in the Department of Biological Sciences, and Bea Zwicker, housekeeping supervisor, had many delicious choices in the array of treats provided by ARAMARK.



▲ Revelers at the afternoon party included, from left, Susan Hersey, staff assistant in academic affairs; Bunny Murphy, compliance manager, Affirmative Action Office; and Tony Szczesiul, assistant professor of English.



▲ Physical Plant staffers, from left, Bill McAllister, Bill Blood, and Ron McAllister shared holiday greetings with the Chancellor.

## Lucas Discusses Interactive Networks at System Conference



◀ Mike Lucas, UMass Lowell's coordinator of Distance Learning, delivered introductory remarks at a system-wide conference on distance learning recently. Sponsored by the Technology Task Force for Academic Development, the conference originated in Coburn Hall and was connected by two-way television hook-ups to participants at other system campuses. Lucas discussed the two-way interactive network, and Steve Tello, associate director of Distance Learning, talked about on-line learning. Some 35 UMass Lowell faculty and staff attended the session in Coburn Hall.

## Pierson Discusses 'Antislavery Masculinities' at Salon Session



◀ Asst. Prof. Michael Pierson of the History Department was the featured speaker at a recent session of The Salon, a regular faculty colloquium in Fine Arts, Humanities and Social Sciences. Pierson's topic was "Gender and Politics: Antislavery Masculinities from Uncle Tom's Cabin to Abraham Lincoln."



▲ UMass Lowell and Hanscom Air Force Base recently celebrated their nearly \$2 million joint research project that could enhance the military's high-speed electronics capabilities. Participants in the Jan. 15 luncheon and press conference included, from left, Dr. David Bliss, team leader from the Air Force Research Laboratory, Sensors Directorate; Dr. Gerry Iseler, president of Iseler Associates; Physics Prof. William Goodhue, project leader and director of the UMass Lowell Photonics Center; Dr. Joseph Lorenzo, chief of the Air Force Optoelectronics Technology Research Laboratory; U. S. Rep. Marty Meehan; and Chancellor William T. Hogan. Another member of the UMass Lowell team is Chemical and Nuclear Engineering Assoc. Prof. Changmo Sung of the Center for Advanced Materials. The research, which is funded through a three-year, \$1.5 million grant from the Defense Advanced Research Projects Agency (DARPA) and another \$400,000 from Hanscom, could result in the creation of a thin substrate (Gasb) that would replace the silicon semiconductors in super high-speed electronics. The new material would be able to operate high currents at low voltages and significantly extend battery life, thereby enabling the creation of lightweight, portable electronics for communications, mapping, video and munitions guidance systems.

## Computer Science, CFWC and WJUL Recognized by Lowell Telecommunications Corporation

**T**he Computer Science Department, the Center for Family, Work and Community and WJUL recently received Community Impact Awards in Media and Technology from the Lowell Telecommunications Corporation (LTC) for their contributions to the community. LTC recognizes people or organizations that use media and technology to better the community.

"We're a community-based center and our lifeblood is the volunteers and members of the community," said George Preston, executive director of LTC. "Our awards recognize community-based programs that are making a difference in people's lives."

**"Our awards recognize community-based programs that are making a difference in people's lives."**

"These three organizations went beyond university-centered projects for the overall community," said Felicia Sullivan, director of the Lowell Community Technology Consortium, a collaboration of LTC and local organizations. "It's very good to know, in general, that the University supports faculty, staff and students to take on these projects. And it's very helpful that these resources have been made available."

Prof. James Canning and the Computer Science Department provided LTC with space; technical resources and students for technology training; advanced training for organizations; and computer access for community members.

Todos Unidos, an English-Spanish newspaper developed out of the Center for Family, Work and Community (CFWC), and its editor, Margarita Zappata-Turcotte, were recognized for the valuable information resource that Todos Unidos provides to the Lowell community.

Dan Toomey, Miguel Lopez and WJUL were acknowledged as an outlet for the immigrant and foreign language programs it airs. Toomey is a project manager with the CFWC and host/producer of the program "Thinking Out Loud," which features a Khmer and a Spanish hour as well as talk on timely environmental, labor or community issues. Lopez is the disc jockey for "Café Latino."

LTC is a nonprofit, member-based technology community center that offers training in television and multimedia productions to people and organizations living or working in Lowell. Recently, LTC has been recognized as a national model by the National Alliance of Media Arts and Culture and the federal Department of Education.

## Dunn Presents at Boston College Irish Colloquium

**U**Mass Lowell student and staff member Mary Lee Dunn presented her research on Irish Famine-Immigrant History at a Boston College colloquium this winter. Dunn, a student in Regional and Economic Social Development and an editor in the Work Environment Department, spoke about a group of several hundred Irish people who waged a rent strike in their town of Ballykilcline and were evicted, then forcibly emigrated to New York, in 1847 and 1848.

The colloquium was organized by the Boston College Irish Studies program, and took place Dec. 10.

## Advancement Executive Director Rizzo Receives CASE Award

Executive Director of University Advancement Don Rizzo received the Quarter Century Circle Award of the Council for the Advancement and Support of Education (CASE) at the District I Conference in Boston on Jan. 14. The award recognizes individuals who have completed at least 25 years of service for nonprofit organizations in the professions encompassed by CASE.

"It's always gratifying to be recognized by your professional peers," said Rizzo, "especially when the organization includes people with whom you have worked shoulder to shoulder for so many years. All of us who are members of CASE have chosen our career paths because we know this work makes a significant impact on people's lives and communities as a whole."

Before coming to UMass Lowell in 1996, Rizzo held several key positions in the development field, including vice president for university advancement at Butler University in Indiana, vice president for institutional advancement at Loyola Univer-



▲ Don Rizzo

sity in New Orleans, and director of major gifts at the University of Denver. He serves on the board of directors of the Association of Fund-Raising Professionals Foundation for Philanthropy and, more locally, on the board of trustees of the Academy of Notre Dame.

## Note Worthy

Eli M. Pierce, president-elect of the American Chemical Society (ACS), has invited **Prof. Rudy Faust** of the Chemistry Department to serve on the canvassing committee for the George A. Olah Award in Hydrocarbon or Petroleum Chemistry.

The award is sponsored by the George A. Olah Endowment and administered by the ACS.

In his letter of invitation, Pierce explained, "During your term of three award-years, you will lead the Society in helping outstanding chemical professionals receive the public recognition that they deserve. In your third and final award-year, you will be asked to serve as chair."

**Prof. Ziyad Salameh**, chair of the Electrical and Computer Engineering Department, has co-authored a paper

titled "Sealed Lead Acid Electric Vehicle Batteries: A Performance Comparison Study" in a recent issue of the International Journal of Power & Energy.

An alumnus who conducted a year-long research project under the direction of **Prof. James Graham-Eagle** has delivered a talk on the project in the Mathematical Sciences Department. The title of the presentation by Greg von Nessi, who graduated with a double major in physics and mathematics, was "Prediction of Combustion Waves." The project was funded by a Faculty-Student Collaborative research grant from the Faculty Teaching Center.

## Shina Published in Three New Books

The writings of Mechanical Engineering Prof. Sammy Shina will appear in three different books in the next year, including a collection of his works on manufacturing and engineering. McGraw-Hill is scheduled to publish *Manufacturing Costs for Electronic Products* this winter, based on lectures and exercises from Shina's graduate courses in manufacturing engineering. Shina submitted the manuscript to McGraw-Hill in December. Elsevier Press published an essay

by the same title in Volume 3 of the *Encyclopedia of Materials*, released in November 2001. Shina is one of 2,000 authors from around the world to be included in the encyclopedia, which encompasses 11 volumes and runs about 10,000 pages.

Shina also wrote a chapter for *Environment Friendly Electronics: Lead-Free Technology*, edited by J Hwang and published in November 2001 by Electrochemical Publications Ltd.

## UMass Lowell Professors Among Public Service Award Recipients

UMass President William M. Bulger presented Public Service Awards to seven University-system professors at a ceremony in October, two of them to UMass Lowell faculty.

Ann Marie Hurley, associate professor of mathematics, and Craig Slatin, assistant professor of health education and policy, were noted by President Bulger as "University faculty who have dedicated themselves to especially high forms of public service."

Along with her regular teaching schedule, Hurley has maintained a parallel career in the Continuing Education Department for more than 30 years, much of that time as coordinator of the Information Technology program. Information Technology is the largest degree program in Continuing Studies and Corporate Education at UMass Lowell.

Hurley established the first full bachelor's degree offered on-line in New England through the UMass Lowell program. She has overseen the selection and promotion of on-line courses throughout her career, helping to generate nearly \$9 million in gross revenues from Information Technology tuition.

Craig Slatin has been project manager for the Hazardous Waste Worker Training Program, a division of the New England Consortium, since 1990. Under his guidance, the program has gathered more than \$10.3 million in funding from the National Institute of Environmental Health Sciences at the National Institutes of Health.

The other five Public Service Award recipients were: Linda Weinreb, M.D., of the Department of Family Medicine and Community Health at UMass Medical School; Richard Upchurch, professor of



▲ Prof. Anne Marie Hurley, coordinator of the Information Technology Program in Continuing Studies, and Asst. Prof. Craig Slatin, project manager for the Hazardous Waste Worker Training Program, were two of seven UMass professors given Public Service Awards at a ceremony last October.

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# Research Notes

**Azaroff, Lenore**  
\$162,000  
**Centers for Disease Control and Prevention**  
Developing Community-based Research with Immigrants

**Barry, Carol and Joey Mead**  
\$30,000  
**JDS Uniphase, Inc.**  
Nanoparticulate Blend Program

**Brown, Gilbert**  
\$10,000  
**North Atlantic Energy Service**  
UMass Lowell Nuclear Engineering Internships at Seabrook Station

**Buchholz, Bryan, Robert Karasek and Laura Punnett**  
\$974,834  
**National Institutes of Health**  
Musculoskeletal Disorder Follow-up in Automobile Manufacturing

**Cholli, Ashok L.**  
\$6,363  
**Muro-Pharmaceuticals**  
Study of Molecules of Pharmaceutical Interest

**McCarthy, Stephen**  
\$15,000  
**World Minerals, Inc.**  
Barrier Filler Research

**Mead, Joey, Stephen Orroth and Nick R. Schott**  
\$12,182  
**Magtek**  
Development of Printable Coatings

**Mead, Joey and Ross Stacer**  
\$61,030  
**Army Research Laboratory**  
Failure Models for Tank Track Pads

**Montesalvo, Mary and Mark Tries**  
\$7,400  
**ICI DeVoe Coatings**  
Decontaminability and Evaluation of Coating Samples

**Nicolosi, Robert**  
\$8,409  
**Nisshin Oil Mills LTD**  
Protocol for Nisshin Oil Mills LTD Study

**Nicolosi, Robert and Thomas Wilson**  
\$15,290  
**Central Soya Company, Inc.**  
Animal Study

**Nicolosi, Robert**  
\$31,871  
**Cargill**  
Evaluation of the Cholesterol Lowering Capacity of an Ethanol Extracted Soluble Fiber with 70% Beta-Glucan from Barley and Oats

**Nicolosi, Robert**  
\$9,520  
**American Emu Oil Association**  
Investigation of Biological Activity of Emu Oil

**Nicolosi, Robert**  
\$28,998  
**American Emu Association**  
Emu Oil Study #4

**O'Connell, Peter**  
\$29,646  
**City of Lowell**  
Lowell and the Industrial Revolution: An Interdisciplinary Institute for 8th Grade Teacher Teams

**Panasuk, Regina**  
\$64,386  
**Massachusetts Department of Education**  
Research & Training for the Middle School

**Panasuk, Regina**  
\$43,000  
**Massachusetts Board of Higher Education**  
Collaborative Investigations: Enhancing Elementary and Middle School Teachers' Content Knowledge and Increasing Mathematics Student Achievement

**Prasad, Kanti**  
\$47,312  
**Alabama Agricultural and Mechanical University**  
Enhancement of VLSI Design and Fabrication Capabilities of the EE Program at Alabama A&M University Through Importing State-of-the-Art Instructions in Theoretical and Experimental Procedures to their Seniors at UMass Lowell

**Punnett, Laura**  
\$76,313  
**Centers for Disease Control**  
Risk Factors for Upper Extremity Disorders among Performing Musicians

**Punnett, Laura and Craig Slatin**  
\$3,049,073  
**National Institutes of Health**  
Health Disparities among Healthcare Workers

**Reinisch, Bodo and Gary Sales**  
\$217,500  
**Department of the Air Force**  
Electrodynamics of the Ionosphere by Digital Ion nosondes and Other HF Techniques

**Reinisch, Bodo and Gary Sales**  
\$75,400  
**Department of the Air Force**  
Electrodynamics of the Ionosphere by Digital Ion nosondes and Other HF Techniques

**Richardson, Charles**  
\$5,975  
**United Steelworkers of America**  
Unions and Technological Change

**Sung, Changmo**  
\$40,000  
**U.S. Army Natick**  
Electron Microscopy and Analysis of Nano-ceramics Grown on Organo Templates and Electrospun Fibers

**Wegman, David**  
\$616,062  
**Centers for Disease Control and Prevention**  
Initial Respiratory Responses in Welding Apprentices



## Santa Tony and His Toys

◀ Tony Koumantzelis of Physical Plant poses with the 2001 haul of donated Christmas toys—shortly before he presented them to the children at the Chelmsford Community Pantry. This is the third year Tony has led a toy-drive on the UMass Lowell campus; the cache of 120-plus toys, he says, makes it “easily the best Christmas we’ve had.” But, as many toys as there were, they were all in the hands of Chelmsford’s children, he says, in the space of “no more than two days.” His only regret? “That Christmas doesn’t come twice a year.”

## Stecchi Elected Chair of Trustees at Saints Memorial Medical Center

**D**r. Janice M. Stecchi, dean of the College of Health Professions, has been elected 2002 Chair of the Board of Trustees of Saints Memorial Medical Center in Lowell.

Stecchi will be the first woman chair in the 135-year histories of St. John’s and St. Joseph’s hospitals, now Saints Memorial Medical Center. She has served on the Board for many years, most recently holding the positions of secretary and vice-chair.

As chair, Stecchi’s priorities will be to maintain the high standards for quality and accessibility of healthcare to the Greater Lowell

community and the financial health of Massachusetts community hospitals.



▲ Dr. Janice M. Stecchi

“There are tremendous challenges facing the healthcare delivery system right now,” said Stecchi. “It is very satisfying to be at the University, where we are helping to address the problem by educating a population of practitioners. I am very pleased to be in this new role at Saints Memorial, supporting the hospital’s commit-

ment to access and quality of care as we work to overcome those challenges.”

# Calendar of Events

## Tuesday, Jan. 22

**Training**, 8-hour emergency responder refresher course, 8 a.m. to 5 p.m., Wannalancit Mill. For information, call the New England Consortium, ext. 3257.

## Wednesday, Jan. 23

**Semester begins**; Continuing Studies and Corporate Education semester begins. Free registration for the semester runs through Jan. 17, after which a \$50 fee is applied. For information, go to <http://continuinged.uml.edu>, or call ext. 2480.

## Friday, Jan. 25

**Hockey**, vs. Maine, 7 p.m., Tsongas Arena. For information, call (978) 934-HAWK.

## Saturday, Jan. 26

**Hockey**, vs. Maine, 7 p.m., Tsongas Arena. For information, call (978) 934-HAWK.

**Women's Basketball**, vs. American International, 2 p.m., Costello Gym. For information, call (978) 934-HAWK.

**Men's Basketball**, vs. American International, 4 p.m., Costello Gym. For information, call (978) 934-HAWK.

## Tuesday, Jan. 29

**Hockey**, vs. Brown, 7 p.m., Tsongas Arena. For information, call (978) 934-HAWK.

## Wednesday, Jan. 30

**Art Gallery Reception**, Ronald Edwards and Judith Edwards, sculpture and painting, 2 to 4 p.m., with a gallery talk at 3 p.m., University Gallery, 71 Wilder St., first floor. Exhibit runs from Jan. 29 to Feb. 20.

## Saturday, Feb. 2

**Women's Basketball**, vs. Assumption, 2 p.m., Costello Gym. For information, call (978) 934-HAWK.

**Men's Basketball**, vs. Assumption, 4 p.m., Costello Gym. For information, call (978) 934-HAWK.

## Sunday, Feb 3

**Hockey**, vs. Merrimack College, 7 p.m., Tsongas Arena. For information, call (978) 934-HAWK.

## Tuesday, Feb. 5

**Training**, 24-hour emergency responder course, 8 a.m. to 5 p.m., Wannalancit Mill. Course runs through Feb. 7. For information, call the New England Consortium, ext. 3257.

## Wednesday, Feb. 6

**Women's Basketball**, vs. Stonehill, 5:30 p.m., Costello Gym. For information, call (978) 934-HAWK.

**Men's Basketball**, vs. Stonehill, 7:30 p.m., Costello Gym. For information, call (978) 934-HAWK.

## Thursday, Feb. 7

**Performance**, STARTS Educational Field Trip Series, "Amelia Bedelia and the Baby & Other Story Books," grades K-2, 9:30 a.m. and 11:30 a.m., Durgin Hall, South Campus. For information, call the Center for the Arts, ext. 4452.

## Saturday, Feb. 9

**Hockey**, vs. UMass Amherst, 7 p.m., Tsongas Arena. For information, call (978) 934-HAWK.

## Sunday, Feb. 10

**Concert**, Faculty/Guest Series, String Currents and the UMass Lowell String Project, directed by Prof. Kay Roberts, 3 p.m., Durgin Concert Hall.

## Monday, Feb. 11

**Lecture**, "Human Rights, Human Lives," by Zimbabwean graphic designer Chaz Maviyane-Davies, noon, 222 O'Leary Library. The lecture will feature artwork by the award-winning designer, whose statements about social responsibility and human rights have stimulated controversy throughout his career. Sponsored by the Art Department.

## Tuesday, Feb. 12

**Training**, 8-hour hazardous waste site worker refresher course, 8 a.m. to 5 p.m., Wannalancit Mill. For information, call the New England Consortium, ext. 3257.

## Wednesday, Feb. 13

**Gallery reception**, "The Big Show," annual juried student exhibit, 2 to 4 p.m.; award presentation at 3 p.m., Dugan Gallery. Exhibit runs from Jan. 29 through Feb. 21.

**Colloquium**, Physics Spring Colloquium, "Chandra Observations of Very Black Black Holes," Dr. Michael Garcia of the Harvard-Smithsonian Center for Astrophysics, 4 p.m., Olney 428. Refreshments at 3:30 p.m.

## Saturday, Feb. 16

**Women's Basketball**, vs. New Haven, 2 p.m., Costello Gym. For information, call (978) 934-HAWK.

**Hockey**, vs. Boston University, 7 p.m., Tsongas Arena. For information, call (978) 934-HAWK.

## Monday, Feb. 18

**Women's Basketball**, vs. Southern New Hampshire, 5:30 p.m., Costello Gym. For information, call (978) 934-HAWK.

**Men's Basketball**, vs. Southern New Hampshire, 7:30 p.m., Costello Gym. For information, call (978) 934-HAWK.

## Wednesday, Feb. 20

**Colloquium**, Spring Physics Colloquium, "The Colorful World of Nanocrystal Quantum Dots," Prof. Moonji Bawendi of MIT, 4 p.m., Olney 428. Refreshments at 3:30 p.m.

## Friday, March 1

**Hockey**, vs. Providence College, 7 p.m., Tsongas Arena. For information, call (978) 934-HAWK.

## Sunday, March 3

**Performance**, Discovery Series, "John McCutcheon," folk music for children. Best for ages 4 to 10., 2 p.m., Durgin Hall, South Campus. Tickets \$9; group discounts available. For information, call ext. 4444.

## Monday, March 4

**Training**, 40-hour hazardous waste site worker training, 8 a.m. to 5 p.m., Wannalancit Mill. Course runs through March 8. For information, call the New England Consortium, ext. 3257.

**Concert**, UMass Lowell Wind Ensemble concerto competition, directed by Prof. David Martins, 7:30 p.m., Durgin Concert Hall.

## Wednesday, March 6

**Art Gallery Reception**, Kathy Marmor, "The Dynamics of Forgetting: Screen Memories," an installation, 3 to 7 p.m., with a gallery talk at 3 p.m., University Gallery. Exhibit runs from Feb. 27 through April 3.

**Art Gallery Reception**, Student Sculpture, curated by Prof. Jim Coates. 2 to 4 p.m., Dugan Gallery. Exhibit runs from Feb. 27 through April 3.

**Colloquium**, Spring Physics Colloquium, "International Nuclear Safeguards in Central Asia," Dr. Parrish Staples of the Los Alamos National Laboratories, 4 p.m., Olney 428. Refreshments served at 3:30 p.m.

## Wednesday, March 13

**Chancellor's Open Hours**, staff, 2 to 3 p.m.; students, 3 to 4 p.m.; faculty, 4 to 5 p.m.; Trustees' Room, Cumnock Hall, North Campus.

**Colloquium**, Spring Physics Colloquium, "What Can RHIC Tell us About QCD," Prof. John Dawson of the University of New Hampshire, 4 p.m., Olney 428. Refreshments at 3:30 p.m.

## Did you know...

that there are 40,148 fluorescent light bulbs in use on campus?

## For Extra Credit...

How much energy does the University use in a year? Answer: Close to 25.5 million kilowatt hours of energy are used by the university in a year.



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